

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope with sufficient postage applied which is addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on this date.

Nancy M. Cochran
Nancy M. Cochran
March 6, 2000
Date

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (IPEA/US)

E. I. DU PONT DE NEMOURS AND COMPANY

INTERNATIONAL APPLICATION NO: PCT/US99/29825

FILED: 15 DECEMBER 1999

CASE NO.: BB1316 PCT

TITLE: PLANT CATABOLITE REPRESSION GENES

**RESPONSE TO COMMUNICATION IN CASES FOR
WHICH NO OTHER FORM IS APPLICABLE**

Assistant Commissioner for Patents
Box PCT
Washington, D.C. 20231

Authorized Officer: Lydell Meadows

Sir:

This is in response to the Communication in Cases for Which No Other Form is Applicable dated February 4, 2000. Attached please find substitute pages in which the claims have been renumbered to clarify that Claim 16 is indeed present in the subject application. No new matter has been added.

Respectfully submitted,

Lynne M. Christenbury

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Dated: 6 March 2000

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Enclosure

13. A method of selecting an isolated polynucleotide that affects the level of expression of a protein involved in catabolite repression in a plant cell, the method comprising the steps of:

- (a) constructing an isolated polynucleotide of Claim 1;
- 5 (b) introducing the isolated polynucleotide into a plant cell; and
- (c) measuring the level of polypeptide in the plant cell containing the polynucleotide to provide a positive selection means.

14. A method of obtaining a nucleic acid fragment encoding a protein involved in catabolite repression comprising the steps of:

- 10 (a) synthesizing an oligonucleotide primer comprising a nucleotide sequence of at least one of 30 contiguous nucleotides derived from a nucleotide sequence selected from the group consisting of SEQ ID NOs:1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, and the complement of such nucleotide sequences; and
- (b) amplifying a nucleic acid sequence using the oligonucleotide primer.

15 15. A method of obtaining a nucleic acid fragment encoding a protein involved in catabolite repression comprising the steps of:

- (a) probing a cDNA or genomic library with an isolated polynucleotide comprising at least one of 30 contiguous nucleotides derived from a nucleotide sequence selected from the group consisting of SEQ ID NOs:1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, and the complement of such nucleotide sequences;
- 20 (b) identifying a DNA clone that hybridizes with the isolated polynucleotide;
- (c) isolating the identified DNA clone; and
- (d) sequencing the cDNA or genomic fragment that comprises the isolated DNA clone.

25 16. A composition comprising the isolated polynucleotide of Claim 1.

17. A composition comprising the isolated polypeptide of Claim 10.

18. An isolated polynucleotide comprising the nucleotide sequence having at least one of 30 contiguous nucleotides derived from a nucleic acid sequence selected from the group consisting of SEQ ID NOs:1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, and the complement of such sequences.

30 19. An expression cassette comprising an isolated polynucleotide of Claim 1 operably linked to a promoter.

20. A method for positive selection of a transformed cell comprising:

- (a) transforming a host cell with the chimeric gene of Claim 5 or an expression cassette of Claim 19; and
- 35 (b) growing the transformed host cell under conditions which allow expression of the polynucleotide in an amount sufficient to complement a null mutant and alter catabolite repression pathways to provide a positive selection means.

21. The method of Claim 20 wherein the host cell is a plant cell.
22. The method of Claim 21 wherein the plant cell is a dicot or a monocot.
23. An isolated polynucleotide comprising a first nucleotide sequence encoding a polypeptide of at least 58 amino acids that has at least 80% identity based on the Clustal method of alignment when compared to a polypeptide selected from the group consisting of SEQ ID NOs:16, 18, 20 and 22, or a second nucleotide sequence comprising the complement of the first nucleotide sequence.
24. An isolated polynucleotide comprising a first nucleotide sequence encoding a polypeptide of at least 50 amino acids that has at least 60% identity based on the Clustal method of alignment when compared to a polypeptide selected from the group consisting of SEQ ID NOs:2, 4, 6, 8, 10, 12, 14, 16, 18, 20, and 22, or a second nucleotide sequence comprising the complement of the first nucleotide sequence.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents, Box PCT
United States Patent and Trademark Office
Washington, D.C. 20231
www.uspto.gov

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|-------------------------------|-----------------------|------------------|
| U.S. APPLICATION NO. | FIRST NAMED APPLICANT | ATTY. DOCKET NO. |
| 09/857525 | ALLEN S | BB-1316 |
| INTERNATIONAL APPLICATION NO. | | |
| PCT/US99/29825 | | |
| I.A. FILING DATE | PRIORITY DATE | |
| 15 DEC 99 | 16 DEC 98 | |
| DATE MAILED: 09 JUL 2001 | | |

GREGORY J FEULNER
E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
1007 MARKET STREET
WILMINGTON, DE 19898

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

1. The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as ☐ a Designated Office (37 CFR 1.494) ☒ an Elected Office (37 CFR 1.495):

- | | |
|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> U.S. Basic National Fee. | <input type="checkbox"/> Indication of Small Entity Status. |
| <input checked="" type="checkbox"/> Copy of the international application. | <input type="checkbox"/> Translation of the international application into English. |
| <input checked="" type="checkbox"/> Oath or Declaration of inventors(s). | <input type="checkbox"/> Translation of Article 19 amendments into English. |
| <input type="checkbox"/> Copy of Article 19 amendments. | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Priority Document. | |
| <input checked="" type="checkbox"/> The International Preliminary Examination Report in English and its Annexes, if any. | |
| <input type="checkbox"/> Translation of Annexes to the International Preliminary Examination Report into English. | |

2. ☐ Applicant has requested early processing under 35 U.S.C. 371(f) but has not filed the following indicated items and/or the indicated items in paragraph 3 below. The Basic National Fee and the copy of the international application must be filed prior to 20 or 30 months from the priority date to avoid abandonment.

- | | |
|---------------------------------------------------|-----------------------------------------------------------------|
| <input type="checkbox"/> U.S. Basic National Fee. | <input type="checkbox"/> Copy of the international application. |
|---------------------------------------------------|-----------------------------------------------------------------|

3. The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> a. Translation of the application into English. A processing fee will be required if submitted later than the appropriate 20 or 30 months from the priority date. |
| <input type="checkbox"/> The current translation is defective for the reasons indicated on the attached Notice of Defective Translation. |
| <input type="checkbox"/> b. Processing fee for providing the translation of the application and/or the Annexes later than the appropriate 20 or 30 months from the priority date (37 CFR 1.492(f)). |
| <input type="checkbox"/> c. Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), properly identifying the application (preferably by the International application number and international filing date). A surcharge will be required if submitted later than the appropriate 20 or 30 months from the priority date. |
| <input type="checkbox"/> The current oath or declaration does not comply with 37 CFR 1.497(a) and (b) for the reasons indicated on the attached PCT/DO/EO/917. |
| <input type="checkbox"/> d. Surcharge for providing the oath or declaration later than the appropriate 20 or 30 months from the priority date (37 CFR 1.492(e)). |

4. Additional claim fees of \$_____ as a ☐ large entity ☐ small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due (37 CFR 1.492(g)). See attached PTO-875.

5. ☒ Applicant has not submitted the required sequence listing pursuant to 37 CFR 1.821-1.825. See attached PCT/DO/EO/920.

ALL OF THE ITEMS SET FORTH IN 3(a)-3(d), 4 AND 5 ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 22 OR 32 MONTHS (where 37 CFR 1.495 applies) FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

6. If box 3a or 3c is checked, a translation of the Annexes **MUST** be submitted no later than the time period set above or the Annexes will be cancelled. A processing fee will be required if submitted later than 20 or 30 months from the priority date.

7. ☐ The Article 19 amendments are cancelled since a translation was not provided by the appropriate 20 (37 CFR 1.494(d)) or 30 (37 CFR 1.495(d)) months from the priority date.

Applicant is reminded that any communication to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above. (37 CFR 1.5)

A copy of this notice MUST be returned with this response.

Enclosed: ☐ PCT/DO/EO/917 ☐ Notice of Defective Translation
☐ PTO-875 ☒ PCT/DO/EO/920

Barbara A. Campbell



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|-------------------------------|-----------------------|------------------|
| U.S. APPLICATION NO. | FIRST NAMED APPLICANT | ATTY. DOCKET NO. |
| 09/857525 | ALLEN S | BB-1316 |
| INTERNATIONAL APPLICATION NO. | | |

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|------------------|---------------|
| I.A. FILING DATE | PRIORITY DATE |
| 15 DEC 99 | 16 DEC 98 |

DATE MAILED:

09 JUL 2001

**NOTIFICATION TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS
CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE
DISCLOSURES**

Applicant has submitted papers under 35 U.S.C. 371 to enter the national stage in the United States of America. The items indicated below, however, are missing. The period within which to correct the deficiency noted below and avoid abandonment is set forth in the accompanying Notification.

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):

- ☒ The application fails to comply with the requirements of 37 CFR 1.821-1.825.
- ☐ This application does not contain, a "Sequence Listing" as a separate part of the disclosure on paper copy or compact disc, as required by 37 CFR 1.821(c).
- ☒ A copy of the "Sequence Listing" in computer readable format has not been submitted as required by 37 CFR 1.821(e).
- ☐ A copy of the "Sequence Listing" in computer readable form has been submitted. The content of the computer readable form, however, does not comply with the requirements of 37 CFR 1.822 and/or 1.832, as indicated on the attached marked-up copy of the "Raw Sequence Listing."
- ☐ The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
- ☐ The paper copy or compact disc of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 CFR 1.821(e).
- ☐ Other: _____

APPLICANT MUST PROVIDE:

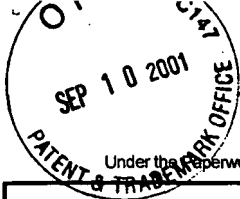
- ☒ An initial or substitute computer readable form (CRF) of the "Sequence Listing."
- ☐ An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.
- ☒ A statement that the contents of the paper or compact disc and the computer readable form are the same and, where applicable, include no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b) or 1.825(d).

**FOR QUESTIONS REGARDING COMPLIANCE WITH THESE REQUIREMENTS, PLEASE
CALL:**

(703) 308-4216, for Rules interpretation,
(703) 308-4212, for CRF submission help,
(703) 287-0200, for PatentIn software help.

Barbara A. Campbell

Telephone: 703-305-3631



410 Recd PCT/PTO 10 SEP 2001

PCT

PTO/SB/92 (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

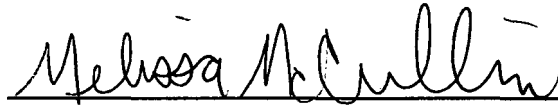
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Assistant Commissioner for Patents
Washington, D.C. 20231

on September 7, 2001
Date


Signature

MELISSA MCCULLIN
Type or printed name of person signing Certificate

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

09/857,525
BB1316
PRELIMINARY AMENDMENT AND RESPONSE TO NOTIFICATION OF MISSING
REQUIREMENTS
STATEMENT UNDER 37 CFR 1.821(g) and 1.825(b)
SEQUENCE LISTING - CRF
SEQUENCE LISTING - 18 PAGES
RETURN RECEIPT CARD